Please provide the following information, and submit to the NOAA DM Plan Repository.

Reference to Master DM Plan (if applicable)

As stated in Section IV, Requirement 1.3, DM Plans may be hierarchical. If this DM Plan inherits provisions from a higher-level DM Plan already submitted to the Repository, then this more-specific Plan only needs to provide information that differs from what was provided in the Master DM Plan.

URL of higher-level DM Plan (if any) as submitted to DM Plan Repository:

1. General Description of Data to be Managed

1.1. Name of the Data, data collection Project, or data-producing Program:

Benthic Habitat Mapping - Dry Tortugas RoxAnn Acoustic Sensor Data Points

1.2. Summary description of the data:

During April 2001 RoxAnn single-beam acoustic surveys were conducted at the North Unit of the Tortugas Ecological Reserve, Florida. Thirteen transects associated with fixed bottom sampling stations were surveyed to characterize the ecotone around the stations. In addition survey tracks were run along the outer edge of the Tortugas platform reef complex and into the interior of the platform. A towed video sled (minibat) was deployed simultaneously with the RoxAnn survey which provided a live video ground truth to the acoustic signals. Using this ground truth several bottom classes were identified including coral, seagrass, algae, unconsolidated sediments, and hardbottoms. The original RoxAnn categories are preserved in the Class field and benthic habitat codes from the Florida System for Classifying Estuarine and Marine Environments (SCHEME) system are preserved in the SCHEME field. The depth value is in meters below transducer surface.

Original contact information:

Contact Org: NOAA Office for Coastal Management

Phone: 843-740-1202

Email: coastal.info@noaa.gov

1.3. Is this a one-time data collection, or an ongoing series of measurements?

One-time data collection

1.4. Actual or planned temporal coverage of the data:

2001-04-08 to 2001-04-12

1.5. Actual or planned geographic coverage of the data:

W: -82.99687858505, E: -82.76481755499, N: 24.73908925585, S: 24.51945289841

1.6. Type(s) of data:

(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)

Map (digital)

1.7. Data collection method(s):

(e.g., satellite, airplane, unmanned aerial system, radar, weather station, moored buoy, research vessel, autonomous underwater vehicle, animal tagging, manual surveys, enforcement activities, numerical model, etc.)

1.8. If data are from a NOAA Observing System of Record, indicate name of system:

1.8.1. If data are from another observing system, please specify:

2. Point of Contact for this Data Management Plan (author or maintainer)

2.1. Name:

NOAA Office for Coastal Management (NOAA/OCM)

2.2. Title:

Metadata Contact

2.3. Affiliation or facility:

NOAA Office for Coastal Management (NOAA/OCM)

2.4. E-mail address:

coastal.info@noaa.gov

2.5. Phone number:

(843) 740-1202

3. Responsible Party for Data Management

Program Managers, or their designee, shall be responsible for assuring the proper management of the data produced by their Program. Please indicate the responsible party below.

3.1. Name:

3.2. Title:

Data Steward

4. Resources

Programs must identify resources within their own budget for managing the data they produce.

- 4.1. Have resources for management of these data been identified?
- 4.2. Approximate percentage of the budget for these data devoted to data management (specify percentage or "unknown"):

5. Data Lineage and Quality

NOAA has issued Information Quality Guidelines for ensuring and maximizing the quality, objectivity, utility, and integrity of information which it disseminates.

5.1. Processing workflow of the data from collection or acquisition to making it publicly accessible

(describe or provide URL of description):

Process Steps:

- 2001-04-01 00:00:00 Between 8 and 12 April 2001 RoxAnn single-beam acoustic data were collected along 16 transects running across the edge of the Tortugas platform reef. The transducer was mounted on a pole attached to the side of the research vessel and was co-located with a PLGR GPS unit. Data were recorded at 1 second intervals. The E1 and E2 signals received were displayed and logged in the normal RoxMap Scientific software environment. The vessel speed during collection was approximately 4 kts. Simultaneous to collection of the acoustic data a towed video sled was deployed astern of the ship. The picture from this video was displayed in the lab within view of the RoxAnn data analyst. This allowed a near real-time reference for the acoustic data. This ground-truth was used to assign the RoxAnn soundings into several bottom classes. At the conclusion of each transect run. The instrument was shut off until the next transect was visited. - 2003-12-01 00:00:00 - The full RoxAnn record collected during the April cruise was exported from the RoxMap environment and converted into ESRI shapefile format for further analysis. A set of tools developed at OCM specifically for cleaning RoxAnn data were used to remove noise and anomalous points from the record. These points included spikes and pits in the bathymetry as well as bad data caused by surface turbulence. Each bottom class in the data was then exported individually and displayed on a scatterplot of E1 vs. E2 values to examine its geometry. The cluster means (E1 and E2) for each class were also displayed relative to each other as a logical check between classes. The final results were recoded into the Florida SCHEME benthic habitat classification system to ensure consistency with other OCM
- 5.1.1. If data at different stages of the workflow, or products derived from these data, are subject to a separate data management plan, provide reference to other plan:
- 5.2. Quality control procedures employed (describe or provide URL of description):

6. Data Documentation

The EDMC Data Documentation Procedural Directive requires that NOAA data be well documented, specifies the use of ISO 19115 and related standards for documentation of new data, and provides links to resources and tools for metadata creation and validation.

benthic data.

6.1. Does metadata comply with EDMC Data Documentation directive?

No

6.1.1. If metadata are non-existent or non-compliant, please explain:

Missing/invalid information:

- 1.7. Data collection method(s)
- 3.1. Responsible Party for Data Management
- 4.1. Have resources for management of these data been identified?
- 4.2. Approximate percentage of the budget for these data devoted to data management
- 5.2. Quality control procedures employed
- 7.1. Do these data comply with the Data Access directive?
- 7.1.1. If data are not available or has limitations, has a Waiver been filed?
- 7.1.2. If there are limitations to data access, describe how data are protected
- 7.3. Data access methods or services offered
- 7.4. Approximate delay between data collection and dissemination
- 8.1. Actual or planned long-term data archive location
- 8.3. Approximate delay between data collection and submission to an archive facility
- 8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?

6.2. Name of organization or facility providing metadata hosting:

NMFS Office of Science and Technology

6.2.1. If service is needed for metadata hosting, please indicate:

6.3. URL of metadata folder or data catalog, if known:

https://www.fisheries.noaa.gov/inport/item/47885

6.4. Process for producing and maintaining metadata

(describe or provide URL of description):

Metadata produced and maintained in accordance with the NOAA Data Documentation Procedural Directive: https://nosc.noaa.gov/EDMC/DAARWG/docs/EDMC_PD-Data_Documentation_v1.pdf

7. Data Access

NAO 212-15 states that access to environmental data may only be restricted when distribution is explicitly limited by law, regulation, policy (such as those applicable to personally identifiable information or protected critical infrastructure information or proprietary trade information) or by security requirements. The EDMC Data Access Procedural Directive contains specific guidance, recommends the use of open-standard, interoperable, non-proprietary web services, provides information about resources and tools to enable data access, and includes a Waiver to be submitted to justify any approach other than full, unrestricted public access.

7.1. Do these data comply with the Data Access directive?

- 7.1.1. If the data are not to be made available to the public at all, or with limitations, has a Waiver (Appendix A of Data Access directive) been filed?
- 7.1.2. If there are limitations to public data access, describe how data are protected from unauthorized access or disclosure:
- 7.2. Name of organization of facility providing data access:

NOAA Office for Coastal Management (NOAA/OCM)

- 7.2.1. If data hosting service is needed, please indicate:
- 7.2.2. URL of data access service, if known:

ftp://ftp.coast.noaa.gov/pub/benthic/Single_Beam_Acoustic_Data/FL_DryTortugas_rox.zip

- 7.3. Data access methods or services offered:
- 7.4. Approximate delay between data collection and dissemination:
 - 7.4.1. If delay is longer than latency of automated processing, indicate under what authority data access is delayed:

8. Data Preservation and Protection

The NOAA Procedure for Scientific Records Appraisal and Archive Approval describes how to identify, appraise and decide what scientific records are to be preserved in a NOAA archive.

8.1. Actual or planned long-term data archive location:

(Specify NCEI-MD, NCEI-CO, NCEI-NC, NCEI-MS, World Data Center (WDC) facility, Other, To Be Determined, Unable to Archive, or No Archiving Intended)

- 8.1.1. If World Data Center or Other, specify:
- 8.1.2. If To Be Determined, Unable to Archive or No Archiving Intended, explain:
- **8.2. Data storage facility prior to being sent to an archive facility (if any):** Office for Coastal Management Charleston, SC
- 8.3. Approximate delay between data collection and submission to an archive facility:
- 8.4. How will the data be protected from accidental or malicious modification or

deletion prior to receipt by the archive?

Discuss data back-up, disaster recovery/contingency planning, and off-site data storage relevant to the data collection

9. Additional Line Office or Staff Office Questions

Line and Staff Offices may extend this template by inserting additional questions in this section.